Academic Program Review

ACADEMIC YEAR	2014	☐ Basic Skills ☐ Transfer ☒ Career Technical Education (CTE)
PROGRAM	Water Technology	
DEPARTMENT	Industrial Technology	
DIVISION	Economic and Workforce Development	
SUBMITTER	Manuel Sanchez	

I. INSTITUTIONAL GOALS

INSTITUTIONAL GOAL **1**	**INSTITUTIONAL MISSION AND EFFECTIVENESS** – The College will maintain programs and services that focus on the mission of the College supported by data-driven assessments to measure student learning and student success.
INSTITUTIONAL GOAL **2**	**STUDENT LEARNING PROGRAMS AND SERVICES** – The College will maintain instructional programs and services which support student success and the attainment of student educational goals.
INSTITUTIONAL GOAL **3**	**RESOURCES** – The College will develop and manage human, technological, physical, and financial resources to effectively support the College mission and the campus learning environment.
INSTITUTIONAL GOAL **4**	**LEADERSHIP AND GOVERNANCE** – The Board of Trustees and the Superintendent/President will establish policies that assure the quality, integrity, and effectiveness of student learning programs and services, and the financial stability of the institution.

II. PROGRAM GOALS

A. PAST – EVALUATION OF PREVIOUS CYCLE OBJECTIVES/PROGRAM GOALS (SET IN PREVIOUS YEAR)

List your previous objectives/goals and associated Institutional Goals. All program goals must address at least one of the institutional goals.

PAST PROGRAM GOALS (Describe past program goals.)	INSTITUTIONAL GOAL(S) (Check all that apply.)

1	PAST PROGRAM GOAL #1	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Demonstrate knowledge of water source, treatment flocculation, sedimentation,odor control, plant operation and laboratory procedures.HIre Full Time faculty member to take charge of program, meet with industry and maintain program relevance.	☐ 1 ☒ 2 ☐ 3 ☐ 4
	☐ Met ☐ Partially Met ☒ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** Position was not prioritized by college for recruitment.	

2	PAST PROGRAM GOAL #2	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Allow program to use science laboratories for instruction so students receive better hands-on experiences.	☐ 1 ☒ 2 ☐ 3 ☐ 4
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** Laboratory hours are now conducted in a science lab.	

3	PAST PROGRAM GOAL #3	INSTITUTIONAL GOAL(S)
	Identify Program Goal from Last Program Review: Program to receive funding for equipment and instructional supplies to enhance instruction	☐ 1 ☒ 2 ☐ 3 ☐ 4
	☐ Met ☒ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** Program was allocated Perkins funds and a master list of equipment needed was submitted. List partially supplied.	

Comments:

B. PRESENT – DATA ANALYSIS AND PROGRAM HEALTH

1. Summarize and analyze all disaggregated data by day, evening, gender, ethnicity, and distance education regarding enrollments, fill rates, productivity, completion, success, retention, persistence, and transfer (complete a, b, & c). ***Attach graphs or trend data***.

   a. What factors or overall changes in your program may have influenced or contributed to observed trends in the data?

      The overall program data shows a level of consistency on fill rates (75%-85%) success rates (7-%-80%) and retention (80%-90%). The majority of courses are taught in the evening to accommodate evening students and faculty since all faculty is part-time and hold day jobs in the industry. The demographic distribituon is primarely male (90%) altough female students have higher succes and retention rtaes. The program productivity hovers around 400 which close to the 425 target. The program has ethnicity breakdown consisitent with the oiverall demographics of the college. The program does not have on-line courses.

   b. What program changes, if any, will you recommend that you expect would have a positive effect on your students' outcomes (Be specific. How will these changes impact data?)

      The program recently completed a revision of its curriculum and modofied to program sequentially through pre-requisites to improve success and retention. The outcome of that was felt this fall and spring with low enrolment numbers for the higher level courses but very strong enrollment for the beginning levels.

   c. Describe any trends in demographic diversity among students in your program, if applicable.

      Described in section (a) above.

2. Summarize revisions, additions, deletions, or alternate delivery methods to courses and/or program based on the last program review.

   The change in pre-requistes will have a positive efefct ion the program by forcing students to grasp the foundational componemets of the program before starting in more complex subjects. This should help in success and retention. The program also is using the science lab for its lab hours for students to receiove more hands-on training which was a weakness identified ny the advisory committee. The program also is receiving Perkins funding for instructional supplies which is allowing the program to purchase morev laboratory supplies.

3. Evaluate the program's viability by addressing program completion, size (FTES), projections (growing/stable/declining), and quality of outcomes. For CTE programs, also include labor market projections, placement, and performance on external testing/exams (i.e. ASE, NABCEP) and industry-recognized credentials, placement, and performance on external testing or exams (NCLEX, ASC, NAP).

   See attached CTE program review.

C. FUTURE – LIST OF "SMART" (SPECIFIC MEASURABLE ATTAINABLE RELEVANT TIME-LIMITED) PROGRAM OBJECTIVES FOR NEXT ACADEMIC YEAR TO ADDRESS PROGRAM IMPROVEMENT, GROWTH, OR UNMET NEEDS/GOALS. ALL PROGRAM GOALS MUST ADDRESS AT LEAST ONE OF THE INSTITUTIONAL GOALS.

FUTURE PROGRAM GOALS (Describe future program goals. List in order of budget priority.)	INSTITUTIONAL GOAL(S) (Check all that apply.)

1	FUTURE PROGRAM GOAL #1 Budget Priority #1	INSTITUTIONAL GOAL(S)
Identify Goal: Program needs a full time instructor. Currently taught by PT faculty.		☐ 1 ☒ 2 ☐ 3 ☐ 4
Objective: A FT instructor will take ownership of the program and maintain currency with industry needs.		
Task(s): Submit request to faculty prioritization committee for the recruiutment/hire of a new facuklty member.		
Timeline: Spring 2014		

EXPENSE TYPE	FUNDING TYPE		RESOURCE PLAN (Check all that apply.)	BUDGET REQUEST
☐ One-Time ☒ Recurring	☐ Categorical Specify:	☒ General Fund	☐ Facilities ☐ Marketing ☐ Technology ☐ Professional Development ☒ Staffing	$80,000

2	FUTURE PROGRAM GOAL #2 Budget Priority #2	INSTITUTIONAL GOAL(S)
Identify Goal: Provide a dedicated classroom/facility for water treatment programs.		☐ 1 ☒ 2 ☐ 3 ☐ 4
Objective: To set up all acquired teaching materials and improve the academic standards by providing the required infrastructure.		
Task(s): Teachers in well equipped technological classrooms typically have easy access to some or all of the following resources: whiteboard, OHP, CD player/tape recorder, video, reference materials such as dictionaries, supplementary reading materials, and increasingly, computers. In addition, they and their students are surrounded by charts, posters, maps and realia which evoke the target language and culture, and provide easy reference for both teacher and students. These can be seen as contributing the extensive water treatment programs. Whether the peripatetic teacher has access to these resources depends on a number of variables including whether the teacher who "owns" the room is prepared to share wall or cupboard space, and/or how much the language teacher is able to carry to class each lesson. While wheeled suitcases are a useful tool for some itinerant teachers, others, who have stairs to contend with, are constrained by what they can easily carry.		
Timeline: On-going		

EXPENSE TYPE	FUNDING TYPE		RESOURCE PLAN (Check all that apply.)	BUDGET REQUEST
☒ One-Time ☐ Recurring	☒ Categorical Specify: Perkins	☐ General Fund	☐ Facilities ☐ Marketing ☒ Technology ☐ Professional Development ☐ Staffing	$10000

3	FUTURE PROGRAM GOAL #3 Budget Priority #3	INSTITUTIONAL GOAL(S)
Identify Goal: Teachers in well equipped technological classrooms typically have easy access to some or all of the following resources: whiteboard, OHP, CD player/tape recorder, video, reference materials such as dictionaries, supplementary reading materials, and increasingly, computers. In addition, they and their students are surrounded by charts, posters, maps and realia which evoke the target language and culture, and provide easy reference for both teacher and students. These can be seen as contributing the extensive water treatment programs. Whether the peripatetic teacher has access to these resources depends on a number of variables including whether the teacher who "owns" the room is prepared to share wall or cupboard space, and/or how much the language teacher is able to carry to class each lesson. While wheeled suitcases are a useful tool for some itinerant teachers, others, who have stairs to contend with, are constrained by what they can easily carry.		☐ 1 ☐ 2 ☐ 3 ☐ 4
Objective: To designate resources for workforce development initiatives to meet the unique needs of water treatment programs. As the Imperial Valley College focuses on meeting the needs of the Imperial Valley residents and industries.		
Task(s): Employment preparation and placement programs aim to provide water treatmetn program studentsthat are out of work or under-employed, provide them with the necessary job readiness training to prepare them to obtain and retain the job, and then support them on their journey from placement to and through at least 180 days of employment.		
Timeline: fall 2014		

EXPENSE TYPE	FUNDING TYPE		RESOURCE PLAN (Check all that apply.)	BUDGET REQUEST
☐ One-Time ☐ Recurring	☐ Categorical Specify:	☒ General Fund	☒ Facilities ☐ Marketing ☐ Technology ☐ Professional Development ☐ Staffing	$10000

TOTAL BUDGET REQUEST	$_____

1. How will your enhanced budget request improve student success?

The items listed for funding will provide more instructional stability in the program and will better prepare the students in this rewarding career.

Comments:

III. INSTITUTIONAL STUDENT LEARNING OUTCOMES (ISLOs)

ISLO 1	COMMUNICATION SKILLS
ISLO 2	CRITICAL THINKING SKILLS
ISLO 3	PERSONAL RESPONSIBILITY
ISLO 4	INFORMATION LITERACY
ISLO 5	GLOBAL AWARENESS

IV. PROGRAM LEARNING OUTCOMES (PLOs)

PROGRAM LEARNING OUTCOMES (Describe learning outcomes.)	**ISLO(S)** [Link PLO to appropriate ISLO(s).]

PLO 1	**PROGRAM LEARNING OUTCOME #1**	**ISLO(S)**
	Identify Program Outcome: Demonstrate knowledge of water source, treatment flocculation, sedimentation,odor control, plant operation and laboratory procedures.	☐ ISLO 1 ☐ ISLO 2 ☐ ISLO 3 ☐ ISLO 4 ☐ ISLO 5
	Measurable Outcome Summary: Group dicussions, analysis performed, fieldtrips, class presentations and hand-on activities.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** Students have been able to demonstrate proper knowledge in the operation of water treatment plants. Local water treatment plants managers have communicated their contentment after hiring Imperial Valley College graduates.	

PLO 2	PROGRAM LEARNING OUTCOME #2	ISLO(S)
	Identify Program Outcome: Ability to calculate all basic mathemathic problems that applied to treatment plant operations. This calculations includes fractions decimals, percentages, ratios, proortions, volumes, metric system and estimation.	☐ ISLO 1 ☒ ISLO 2 ☒ ISLO 3 ☐ ISLO 4 ☐ ISLO 5
	Measurable Outcome Summary: Class activities, midterm, problem solving exercises and quizzes.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:** Students have shown proficiency in mathematics involved in water treatment, the average success rate is 74%.	

PLO 3	PROGRAM LEARNING OUTCOME #3	ISLO(S)
	Identify Program Outcome: Develop preventive maintenance programs and maintain records of inspection and repair for all water works.	☐ ISLO 1 ☐ ISLO 2 ☐ ISLO 3 ☐ ISLO 4 ☐ ISLO 5
	Measurable Outcome Summary: Students completed four in class quizzes with technical essays included.	
	☒ Met ☐ Partially Met ☐ Not Met **Provide detail on any improvements/effectiveness and detail status on those not fully met:**	

***** ATTACH PLO/SLO GRID *****